

REFRIGERANT GAS TRANSMITTER

cool 
guardian



 **seitron**

cool

guardian

COOL GUARDIAN

REFRIGERANT GAS TRANSMITTER

R744
(CO₂)

R410A

R134A

R32

R454B

R407C

R290

R717
(NH₃)

FULL RANGE OF REFRIGERANT GASES



OUTPUTS

Configurable analog outputs
(4 .. 20 mA, 0 .. 5 V, 0 .. 10 V,
1 .. 5 V, 2 .. 10 V)



MODBUS® COMMUNICATION

Up to 32 devices can be connected
via RS485 interface



RELAY OUTPUTS

3 relays that act as fault detectors
and activate low and high level
alarms



INCREASED SAFETY

Built-in audible and visual alarms
for immediate warning of danger, in
compliance with safety standards



EASY MAINTENANCE

Possibility to perform on-site
calibration with mobile App

Designed and Made in ITALY



The Cool Guardian refrigerant gas transmitter guarantees fast response times, high performance even at low temperatures (-40 °C), and built-in audio and visual alarms.

Modern refrigeration systems are designed to ensure maximum efficiency. However, improper installation, accidental damage, or mechanical wear can potentially lead to dangerous gas leaks.

In this context, the Cool Guardian gas transmitter acts as a watchdog against unexpected leaks, which could compromise both the environment and health.



Technical Features

Power supply:	12 .. 24 Vac ± 10% or 12 .. 24 Vdc ± 10%
Power consumption:	5 W
Relay outputs:	3 x 1 A 30 Vac (voltage-free contacts)
Analog output:	4 .. 20 mA, 0 .. 5 V, 0 .. 10 V, 1 .. 5 V, 2 .. 10 V - configurable via App
Modbus® output:	via RS485 with Modbus® RTU protocol up to 32 connectable devices
IP rating:	IP65 (with cables/plugs inserted)
Working temperature:	-40 .. +50 °C (-40 .. +122 °F)
Humidity:	20% .. 90% RH (non-condensing)
Dimensions (HxWxD):	176x192x83 mm

Code	Gas	sensor type	Range
Cool Guardian R744 (CO ₂)	R744 (CO ₂)	NDIR	0 .. 10,000 ppm
Cool Guardian R410A	R410A	Semiconductor	0 .. 1,000 ppm
Cool Guardian R134A	R134A	Semiconductor	0 .. 1,000 ppm
Cool Guardian R32	R32	Semiconductor	0 .. 1,000 ppm
Cool Guardian R454B	R454B	Semiconductor	0 .. 1,000 ppm
Cool Guardian 407C	R407C	Semiconductor	0 .. 1,000 ppm
Cool Guardian R290	R290	Semiconductor	0 .. 2,500 ppm
Cool Guardian R717 (NH ₃)	R717 (NH ₃)	Electrochemical	0 to 100 ppm



Seitron Guard



The Seitron Guard mobile app simplifies configuration, maintenance, and interaction with Cool Guardian gas transmitters.

- Bump test/calibration
- Product configuration: renaming the device for easy location, alarm
- Setting thresholds and managing output settings
- Maintenance: LED test, buzzer, and relay check
- Intuitive monitoring



ACKC01

Safe Guardian and Cool Guardian calibration kit for performing bump tests and calibration. Includes magnet for pairing the transmitter with the Seitron Guard app.
(Accessory not included in the kit)



Complete range of refrigerant gas sensors for various applications. Choosing the right gas sensor to monitor the presence of refrigerants in industrial processes, commercial cooling systems, or refrigeration plants is crucial when it comes to fixed gas transmitters.

The gas range is constantly expanding and custom configurations are available on request.

The following gases are currently available:

R744

R410A

R134A

R32

R454B

407C

PROGRAMMABLE CONTROL UNIT

Gas Master Control

RYF01M

Gas Master Control is the gas detection control unit that allows you to manage transmitters for combustible, toxic, and refrigerant gases. **Up to 40 transmitters** can be connected **simultaneously**, thanks to the 4 .. 20 mA analog inputs and Modbus® RTU output.

Each transmitter (slave) is capable of detecting a specific gas and can communicate its status to the control unit (Master), which can activate any associated loads. In fact, the two additional inputs allow the control unit to be connected to the fire alarm or manual reset button.

Technical Features

Power supply	85 .. 254 Vac 50 .. 60 Hz 12 Vdc
Inputs	8 x 4 .. 20 mA 1 fire alarm input 1 manual reset input
Modbus® RTU (via RS485)	up to 32 gas transmitters
Outputs	5 x 5 A 250 Vac SPDT
LCD	180x128
Dimensions (HxWxD)	276.7x198.4x95.8 mm



ACSR02

Siren with light and sound indicator
Power supply: 5 .. 30 Vdc
Power consumption: 2 W
Sound intensity: 100 dB/m

ACSR03

Siren with light and sound indicator
Power supply: 85 .. 264 Vac, 50 .. 60 Hz
Power consumption: 6 W
Sound intensity: 100 dB/m



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